

AMENDMENTS TO THE CLAIMS:

1. (currently amended) A method of dynamically generating an electronic document based on an enterprise-specific vocabulary, the method comprising the steps of: receiving a request to generate an electronic document containing information responsive to a user query based on one or more information ~~objects~~ chunks that are organized in one or more hierarchical trees, wherein the query contains a concept that specifies a term from the enterprise-specific vocabulary and an information type that specifies the type of information, in association with the concept, requested in the request; wherein concepts and information types are each associated with groupings according to which information chunks are organized; searching a first cache of information ~~objects~~ chunk proxies to identify one or more rows that match the query concept and one or more rows that match the query information type; determining an intersection of the rows, yielding a result set of rows; retrieving matching information ~~objects~~ chunks from a second cache, which is a different cache than the first cache, based on following index pointers in the rows of the result set to matching information chunks; automatically creating the electronic document using the matching information ~~objects~~ chunks and delivering the electronic document in response to the user query.

2. (original) A method as recited in claim 1, wherein the step of searching a cache comprises the steps of: searching a result cache for a result row that is associated with a matching concept and matching information type;

5 if searching the result cache yields no cache hits, searching a content cache of
6 information objects for a first set of interim result rows having a matching
7 associated concept and a second set of interim result rows having a matching
8 associated information type.

1 3. (currently amended) A method as recited in claim 1, wherein the hierarchical trees
2 comprise a concept tree and a technology tree, and wherein each tree is organized as a
3 vocabulary node having one or more relation types, wherein each relation type has
4 one or more relation instances, wherein each relation instance has one or more
5 relation participants, and wherein each relation participant is associated with one or
6 more information ~~objects~~ chunks.

1 4. (original) A method as recited in claim 1, further comprising the step of caching the
2 result set of rows in the result cache.

1 5. (currently amended) A method as recited in claim 1, further comprising the step of
2 providing the information ~~objects~~ chunks to a delivery engine that generates the
3 electronic document based on the information ~~objects~~ chunks and delivers the
4 electronic document in response to the user query.

1 6. (original) A method as recited in claim 1, further comprising the steps of:
2 receiving the user query at a distributed cache manager;
3 selecting one of a plurality of information object cache servers to process the user
4 query and generate the electronic document;
5 forwarding the user query to the selected one of the plurality of information object
6 cache servers.

1 7. (currently amended) A method as recited in claim 1, further comprising the steps of:

receiving the user query from a delivery engine at a distributed cache manager;
selecting one of a plurality of information object cache servers to process the user
query and generate the electronic document;
forwarding the user query to the selected one of the plurality of information object
cache servers;
providing the information ~~objects~~ chunks to a delivery engine that generates the
electronic document based on the information ~~objects~~ chunks and delivers the
electronic document in response to the user query.

8. (currently amended) A computer-readable medium carrying one or more sequences of
instructions for dynamically generating an electronic document based on an
enterprise-specific vocabulary, which instructions, when executed by one or more
processors, cause the one or more processors to carry out the steps of:
receiving a request to generate an electronic document containing information
responsive to a user query based on one or more information ~~objects~~ chunks
that are organized in one or more hierarchical trees, wherein the query
contains a concept that specifies a term from the enterprise-specific
vocabulary and an information type that specifies the type of information, in
association with the concept, requested in the request;
wherein concepts and information types are each associated with groupings according
to which information chunks are organized;
searching a first cache of information ~~objects~~ chunk proxies to identify one or more
rows that match the query concept and one or more rows that match the query
information type;
determining an intersection of the rows, yielding a result set of rows;

17 retrieving matching information ~~objects~~ chunks from a second cache, which is a
18 different cache than the first cache, based on following index pointers in the
19 rows of the result set to matching information chunks;
20 automatically creating the electronic document using the matching information
21 ~~objects~~ chunks and delivering the electronic document in response to the user
22 query.

- 1 9. (currently amended) An apparatus for dynamically generating an electronic document
2 based on an enterprise-specific vocabulary, comprising:
3 means for receiving a request to generate an electronic document containing
4 information responsive to a user query based on one or more information
5 ~~objects~~ chunks that are organized in one or more hierarchical trees, wherein
6 the query contains a concept that specifies a term from the enterprise-specific
7 vocabulary and an information type that specifies the type of information, in
8 association with the concept, requested in the request;
9 wherein concepts and information types are each associated with groupings according
10 to which information chunks are organized;
11 means for searching a first cache of information ~~objects~~ chunk proxies to identify one
12 or more rows that match the query concept and one or more rows that match
13 the query information type;
14 means for determining an intersection of the rows, yielding a result set of rows;
15 means for retrieving matching information ~~objects~~ chunks from a second cache,
16 which is a different cache than the first cache, based on following index
17 pointers in the rows of the result set to matching information chunks;

means for automatically creating the electronic document using the matching information ~~objects~~ chunks and delivering the electronic document in response to the user query.

10. (currently amended) A computer system for dynamically generating an electronic document based on an enterprise-specific vocabulary, the system comprising:
- a computer-readable medium for storing a plurality of information chunks in a content cache, each chunk of the plurality of information chunks retrieved by a directory address; and a plurality of data structures describing atomic concepts among names in an enterprise-specific vocabulary and a plurality of data structures describing relationships among the atomic concepts in a concept cache; and
 - one or more processors configured as an interface for managing the plurality of information chunks in the content cache, managing the plurality of data structures in the concept cache, and arranging content on the Web page based at least in part on data in the concept cache;
 - one or more sequences of instructions in the computer-readable medium, which instructions, when executed by the one or more processors, cause the one or more processors to carry out the steps of:
 - receiving a request to generate an electronic document containing information responsive to a user query based on one or more information ~~objects~~ chunks that are organized in one or more hierarchical trees, wherein the query contains a concept that specifies a term from the enterprise-specific vocabulary and an information type that specifies the type of information, in association with the concept, requested in the request;

22 wherein concepts and information types are each associated with groupings
23 according to which information chunks are organized;
24 searching a first cache of information ~~objects~~ chunk proxies to identify one or
25 more rows that match the query concept and one or more rows that
26 match the query information type;
27 determining an intersection of the rows, yielding a result set of rows;
28 retrieving matching information ~~objects~~ chunks from a second cache, which is
29 a different cache than the first cache, based on following index
30 pointers in the rows of the result set to matching information chunks;
31 automatically creating the electronic document using the matching
32 information ~~objects~~ chunks and delivering the electronic document in
33 response to the user query.

1 11. (previously presented) The method of Claim 1, wherein the concept contained in the
2 query is regarding a product of the enterprise.

1 12. (previously presented) The method of Claim 1, wherein the concept contained in the
2 query is regarding a technology of the enterprise.

1 13. (previously presented) The method of Claim 1, wherein the concept contained in the
2 query is regarding a service provided by the enterprise.

1 14. (previously presented) The method of Claim 1, wherein the concept contained in the
2 query is regarding business of the enterprise.

1 15. (previously presented) The method of Claim 1, wherein the information type
2 contained in the query is associated with a section of the electronic document.

- 1 16. (previously presented) The computer-readable medium of Claim 8, wherein the
2 concept contained in the query is regarding a product of the enterprise.
- 1 17. (previously presented) The computer-readable medium of Claim 8, wherein the
2 concept contained in the query is regarding a technology of the enterprise.
- 1 18. (previously presented) The computer-readable medium of Claim 8, wherein the
2 concept contained in the query is regarding a service provided by the enterprise.
- 1 19. (previously presented) The computer-readable medium of Claim 8, wherein the
2 concept contained in the query is regarding business of the enterprise.
- 1 20. (previously presented) The computer-readable medium of Claim 8, wherein the
2 information type contained in the query is associated with a section of the electronic
3 document.
- 1 21. (previously presented) The apparatus of Claim 9, wherein the concept contained in
2 the query is regarding a product of the enterprise.
- 1 22. (previously presented) The apparatus of Claim 9, wherein the concept contained in
2 the query is regarding a technology of the enterprise.
- 1 23. (previously presented) The apparatus of Claim 9, wherein the concept contained in
2 the query is regarding a service provided by the enterprise.
- 1 24. (previously presented) The apparatus of Claim 9, wherein the concept contained in
2 the query is regarding business of the enterprise.
- 1 25. (previously presented) The apparatus of Claim 9, wherein the information type
2 contained in the query is associated with a section of the electronic document.

- 1 26. (previously presented) The system of Claim 10, wherein the concept contained in the
2 query is regarding a product of the enterprise.
- 1 27. (previously presented) The system of Claim 10, wherein the concept contained in the
2 query is regarding a technology of the enterprise.
- 1 28. (previously presented) The system of Claim 10, wherein the concept contained in the
2 query is regarding a service provided by the enterprise.
- 1 29. (previously presented) The system of Claim 10, wherein the concept contained in the
2 query is regarding business of the enterprise.
- 1 30. (previously presented) The system of Claim 10, wherein the information type
2 contained in the query is associated with a section of the electronic document.